

Department of Ecology

Presentation to Water Resource Mitigation Task Force

November 10, 2020

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Water Resources Program



**We manage water resources to meet the needs
of people and the natural environment, in
partnership with Washington communities.**



How the Foster decision affects our work

Topics covered in this presentation

- Example of a project that Ecology discontinued after the Foster decision
- Focus sheet developed by Ecology this year

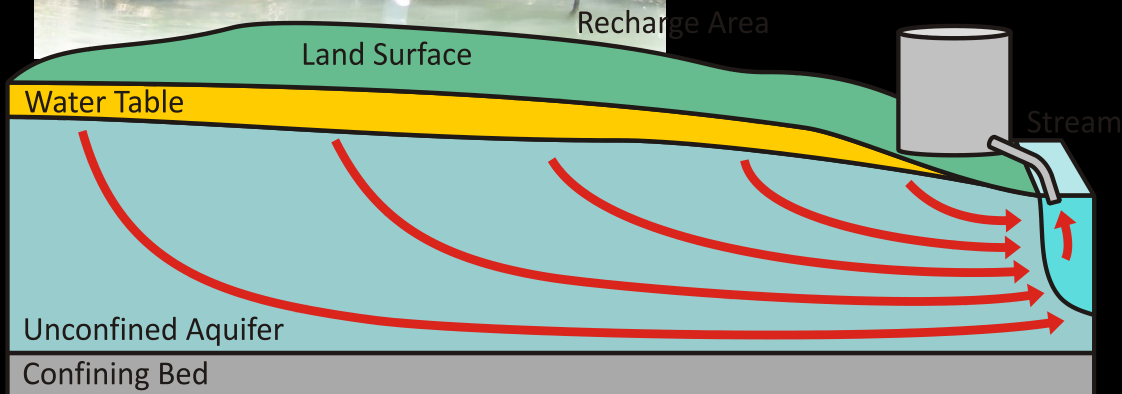


Whatcom County projects

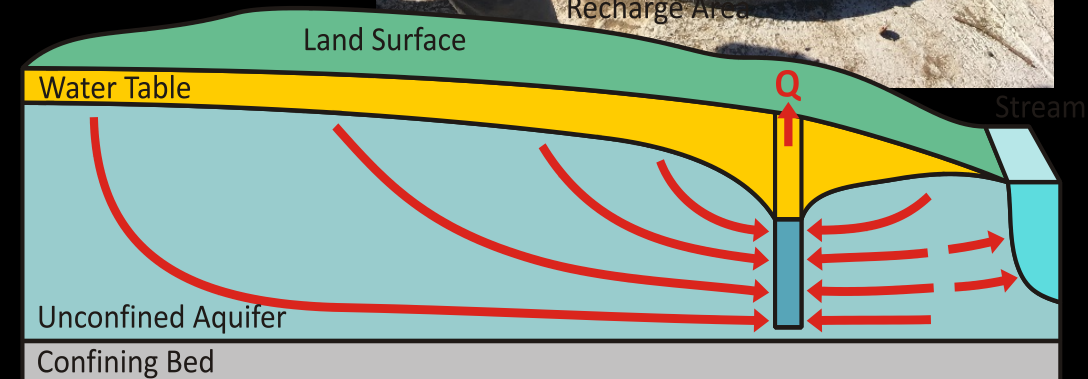
- Ecology funded 2 projects:
 - pilot project to augment creek with groundwater
 - transfer irrigation surface water rights to groundwater wells
- Ecology halted transfers after the decision
- Project partners for pilot: Bertrand WID, Ecology, Whatcom County, and WDFW with Lummi Nation input



Bertrand Creek surface to groundwater changes

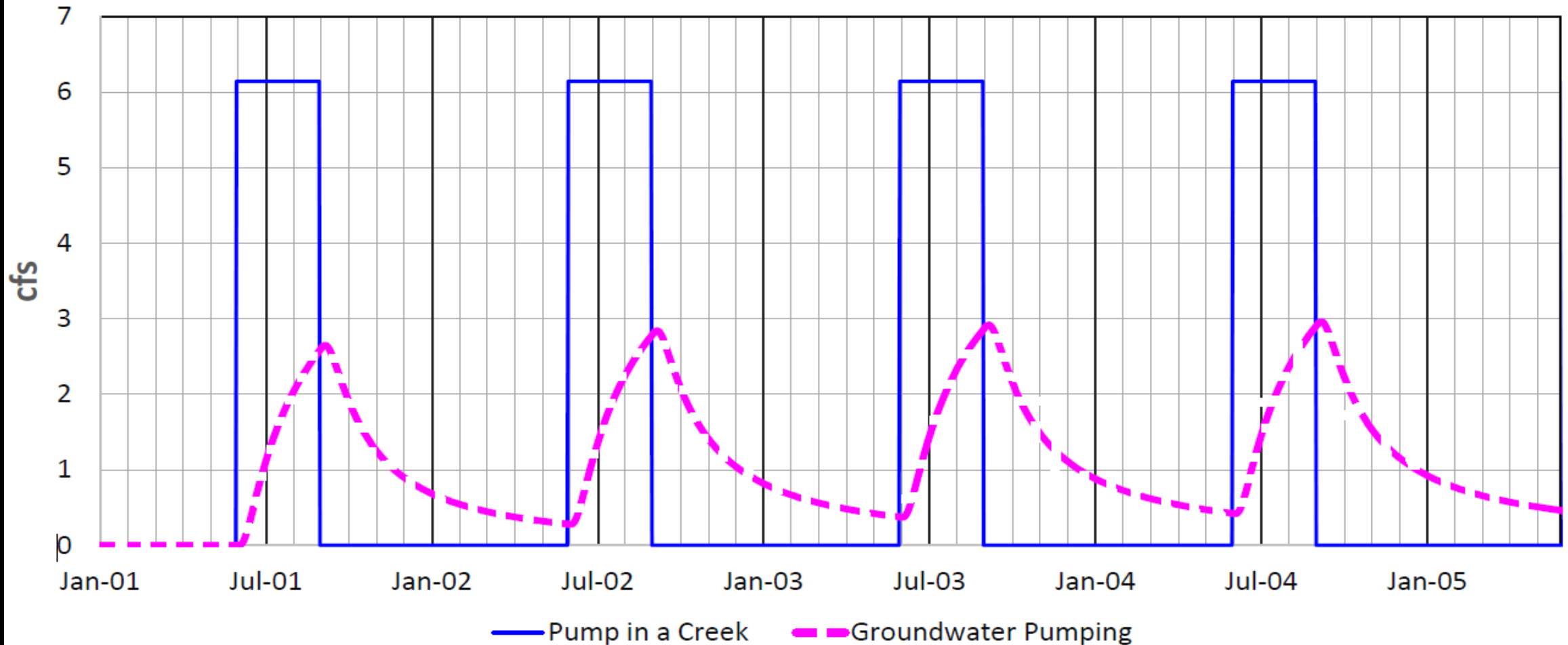


Withdrawal (Q) = Reduction in storage (ΔS) + Reduction in Discharge (ΔD)



Discharge (D) = Recharge (R)

Example of impacts of water withdrawals

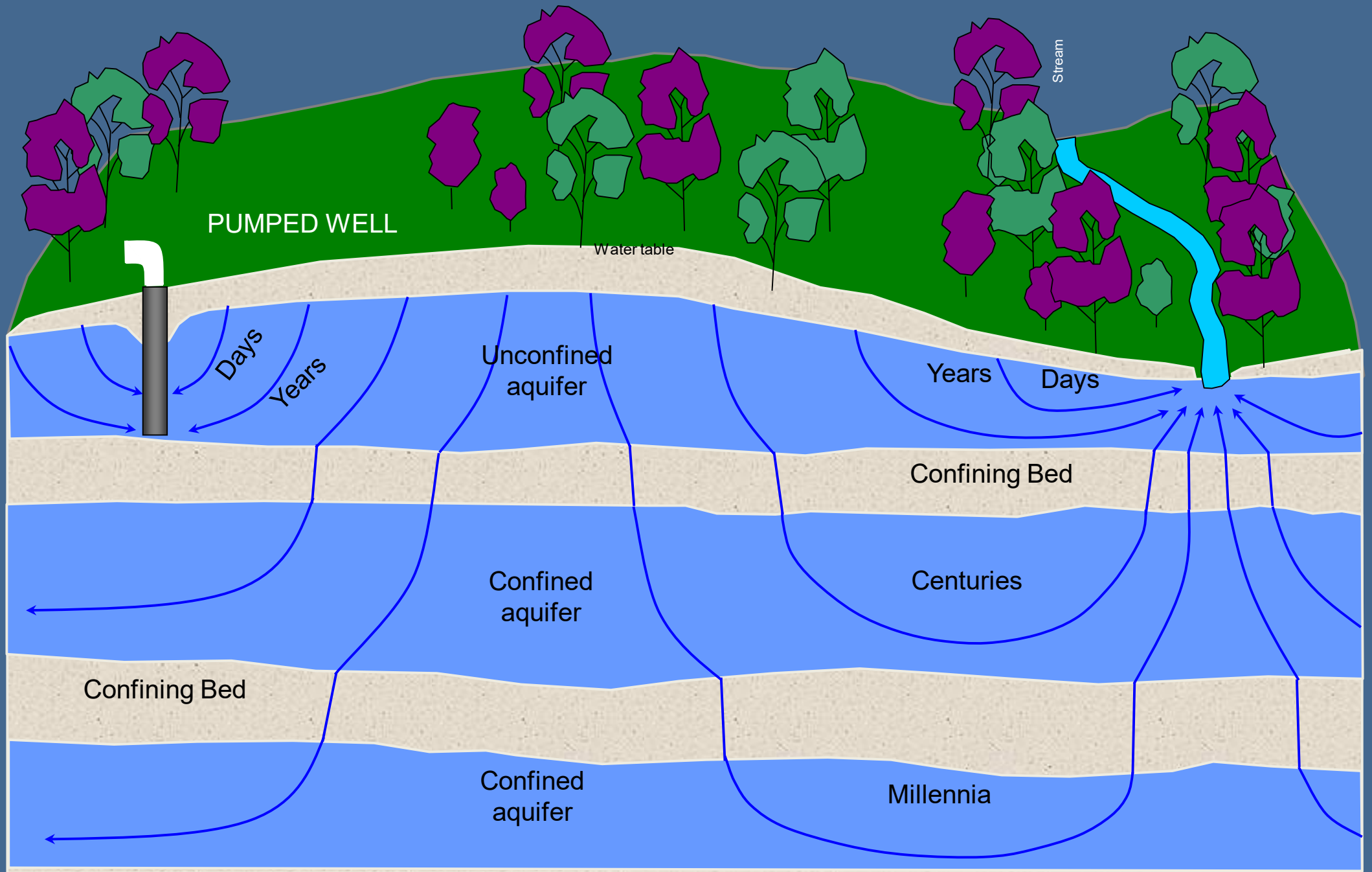


Example of streamflow depletion from surface water diversion and pumping an equivalent volume of groundwater from a nearby well. From Barlow, P.M., and Leake, S.A., 2012 (USGS).

Streamflow planning and the *Foster* decision

- 15 planning groups implementing Streamflow Restoration Law (chapter 90.94 RCW)
- 9 staff involved with developing plans or plan updates
- Plan or plan updates include a mix of projects
 - Projects in plans offset estimated impacts from 20 years of development using permit exempt wells
 - Highest priority projects address impacts in-time and in-place
 - Out-of-time and out-of-place offsets are authorized
- Some potential projects would require water right permit decisions and thus would conflict with Foster decision





Intent of Foster focus sheet

- State more clearly in writing what Ecology has said verbally for a number of years
- Eliminate confusion about different standard in planning under chapter 90.94 RCW
- Discuss implications on water banking and mitigation proposals
- Establish consistency across state

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Focus on: How the Foster decision affects our work

More information

Visit the [Foster decision](https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-rights/Case-law/Foster-decision) page.
<https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-rights/Case-law/Foster-decision>

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The Foster Decision: Summary

In 2015 the State Supreme Court issued a decision on [Foster v. Ecology, City of Yelm, and Washington Pollution Control Hearings Board](#). The decision, frequently referred to as the "Foster decision," reaffirmed and reinforced that instream flows adopted in a rule must be protected from impairment. The decision affects Ecology's work on water right change applications, mitigation packages, and water banking. Instream flows have been adopted in nearly half of the state's watersheds and the Columbia River (see Figure 1).

Background

The city of Yelm applied to Ecology for a new municipal water right permit to meet its increasing water needs. Ecology conditioned the permit on an extensive mitigation plan that included several strategies using both *in-kind* and *out-of-kind* mitigation to account for the impairment to minimum flows that would result from the new water uses.

The mitigation plan included offsetting the total quantity of water through in-kind or "wet water" mitigation. However, the timing of the mitigation did not match perfectly—the in-kind mitigation occurred during the low-flow period only. It was acknowledged that minimum

instream flows would be slightly affected during the fall and spring seasons, so the city proposed mitigating this with out-of-kind mitigation in the form of habitat improvements. Overall, the mitigation package improved habitat conditions for aquatic species and wildlife, as compared to the status quo.

Ecology generally may not issue a water right permit for any use of water that results in withdrawals that impair minimum flows, unless "it is clear that overriding considerations of public interest [OCPI] will be served." In Yelm's water right permit decision, Ecology determined the OCPI exception was



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Page 1





Questions?

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Update on City of Yelm Pilot Project



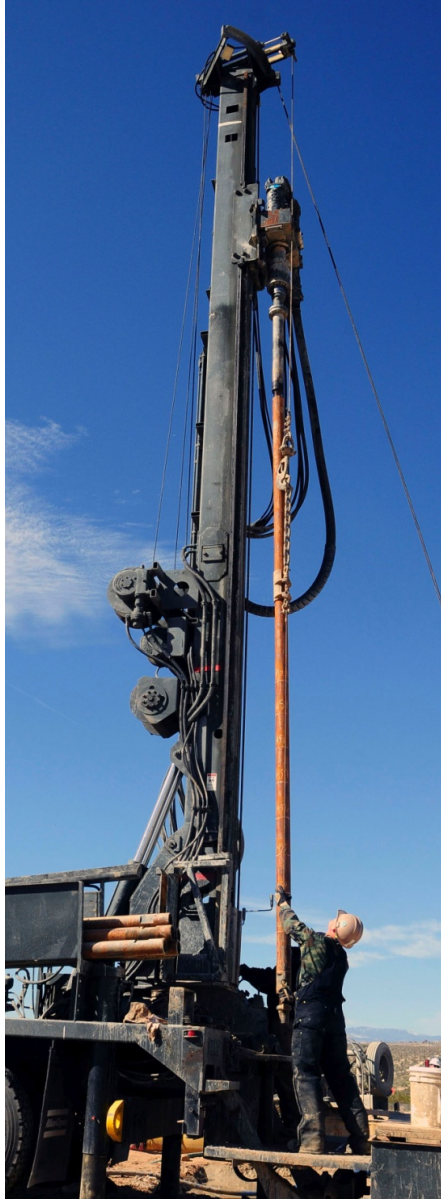
- Overview of proposal
- How proposal addresses sequenced mitigation approach outlined in RCW 90.94.090(9)
- Current status and next steps, including estimated timeline



Overview of proposal

- New water right for the City of Yelm for 942 acre-feet/year
- Includes both minimizing impacts - RCW 90.94.090(9)(b) and compensating for impacts under RCW 90.94.090(9)(c)
- Addresses impacts to both WRIAs 11 and 13
- Originally submitted in 2011





Avoiding impacts

- Meeting the avoidance standard would require Yelm to cease withdrawal from Well SW 1A when attenuated impacts affect adopted instream flows and closures
- Yelm requires a year-round non-interruptible water right permit to serve its customers
- Avoidance of all impacts to regulated water bodies in WRIAs 11 and 13 could not be attained



Minimizing impacts

- Minimizing impacts requires the replacement of water to the impacted water bodies regulated under an instream flow rule
- Unlike mitigation required for a non-pilot water right permit, this in-kind mitigation does not need to be in-place or in-time



Modeling



- Constructed numerical groundwater model
- Estimated impacts to the Deschutes and Nisqually basins
- Determined the interconnectedness between groundwater withdrawals and surface water impacts
- Conservative (high) estimate



Mitigation elements

- Yelm outlined methodology, analysis, and conclusion of their water right acquisition search
- *Nisqually*: More than doubled reclaimed water infiltrated at Cochrane Park infiltration site for Yelm Creek impact
- Year-round release of water from La Grande Dam for Nisqually River



Mitigation elements, continued

- *McAllister Springs & Valley*: Olympia transferred water right from springs to well field
- *Tri-Lakes/Woodland Creek*: no mitigation found; compensation (out-of-kind mitigation) proposed
- *Deschutes River*: Acquired Smith Ranch Farm water right; compensation proposed to supplement mitigation



Compensation approach

- Proposed where mitigation projects were not feasible due to cost, overwhelming uncertainties, or a combination of both
- Proposed projects for the Tri-Lakes/Woodland Creek and Deschutes subbasins
- Used the Habitat Equivalency Analysis (HEA) model developed by NOAA



Details for proposed compensation



- *Tri-Lakes/Woodland Creek and Deschutes subbasins*: partnered with Olympia and Lacey acquiring 20 acres of land for habitat conservation
- Deschutes River: partnered with Olympia and Lacey for restoration to complement acquisition of Smith Ranch right
 - Re-meander channel from Main Spring
 - Re-establish wetland near smaller springs
 - Address erosion along Deschutes River
 - Replant riparian buffer and install buffer fence along the Deschutes River



Evaluation

- Policy 2094 published in July 2019
- “Minimizing impacts” standard: no net annual increase in the quantity of water withdrawn and no net detrimental impacts to fish and related aquatic resources
- “Compensating for impacts” standard: providing net ecological benefits to fish and related aquatic resources in the water resource inventory area



POL-2094

DEPARTMENT OF ECOLOGY WATER RESOURCES PROGRAM
POLICY AND INTERPRETIVE STATEMENT

STREAMFLOW RESTORATION POLICY AND INTERPRETIVE STATEMENT

Effective Date: 07/31/2019

Contact: Program Development and Operations Support

References: *Statute*: Chapters 18.104, 34.05, 90.03, 90.82, and 90.94 RCW; RCW 19.27.097, 43.83B.405, 89.08.460, and 90.44.050
Administrative Rule: Chapters 173-500, 173-531A, 173-563, and 173-566 WAC.

Purpose: To ensure consistency, conformity with state law, and transparency in the implementation of chapters 19.27 and 90.94 RCW.

Application: This policy applies to the evaluation of building permit applications under RCW 19.27.097 and the implementation of activities authorized under chapter 90.94 RCW.

This policy supersedes any previous policy statement with which it conflicts.

1. Background

In January 2018, the Washington State Legislature passed Engrossed Substitute Senate Bill (ESSB) 6091 (session law 2018 c 1). This law was enacted in response to the State Supreme Court's 2016 decision in *Whatcom County vs. Hirst, Futurewise, et al.* (commonly referred to as the "Hirst decision")¹. The law, now primarily codified in chapter 90.94 RCW, clarifies how local governments can issue building permits for homes intending to use a permit-exempt well for their domestic water supply. The law also requires that local watershed planning efforts take place in 15 WRIAs. Plans must be developed that identify projects to offset the potential consumptive impacts of new permit-exempt domestic groundwater withdrawals on instream flows over the next 20 years (2018-2038), and provide a net ecological benefit to the WRIA. Additionally, the law provides opportunities for Ecology to issue water right permits to authorize pilot projects related to the State Supreme Court's 2015 decision in *Foster vs. Ecology, City of Yelm, et al.* (commonly referred to as the "Foster decision")². Such permits may be issued if impacts on streamflows can be mitigated based on criteria provided in the new law. This document provides policy statements as it relates to Ecology's interpretation and implementation

¹ *Whatcom Cty. v. Hirst*, 186 Wn.2d 648, 381 P.3d 1 (2016).

² *Foster v. Dep't of Ecology*, 142 Wn.2d 465, 362 P.3d 959 (2015).



Timeline and next steps

- Mitigation proposal was submitted in September
- Ecology is reviewing in partnership with WDFW, and expect to provide Yelm comments by the end of this year
- Final mitigation plan anticipated by spring 2021
- Report of Examination for public review/comment anticipated later in 2021 (likely in the fall)
- Other pilot project mitigation proposals expected in 2021, and that could delay Ecology's review of Yelm's proposal





Questions?
Thank you for your time!

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